What is claimed is:

1. An optical polarizing module, comprising:

a polarizing beam splitter, reflecting light with a first polarization, defining a first beam, and passing light with a second polarization;

a mirror, disposed near the polarizing beam splitter with a predetermined acute angle to reflect light with the second polarization, passing through the polarizing beam splitter again and forming a second beam;

a first lens array, having a plurality of first lens cells facing the polarizing beam splitter and disposed near the polarizing beam splitter to couple the first beam and the second beam; and

a second lens array with a first surface facing the first lens array and a plurality of second lens cells on the opposite side, wherein the second lens array is disposed parallel to the first lens array at a first distance, the second lens array has a plurality of elongated half-wave plates disposed on the first surface to convert the direction of the first polarization of light in the second beam directed from the first lens array into the direction of the second polarization.

2. The module as claimed in claim 1, wherein the polarizing beam splitter is a wire grid polarizing beam splitter.

3. The module as claimed in claim 1, wherein the first and second lens arrays are used in an optical system with F-number between f/1.5 and f/3.

4. The module as claimed in claim 1, wherein the first lens array and the second lens array have the same aspect ratio.

5. The module as claimed in claim 1, wherein the first and second lens arrays are parallel to an intersection of the extending planes of the polarizing beam splitter and the mirror.

6. The module as claimed in claim 5, wherein an elongated axis of each half-wave plate is parallel to the intersection.

7. The module as claimed in claim 1, wherein the relationship between the first distance (t) and the predetermined included angle (θ) is $\theta = \frac{d_2}{2t}$, wherein d_2 is the length of the longer side of the second lens cells.

8. The module as claimed in claim 1, wherein the half-wave plates are disposed on the first surface parallel to each other at the same intervals.

9. The module as claimed in claim 8, wherein the width of each half-wave plate is equal to half the length of the longer side of the second lens cells.

10. The module as claimed in claim 9, wherein the intervals of the half-wave plates are equal to half the length of the plurality of second lens cells.

11. The module as claimed in claim 10, wherein a central line divides each second lens cell into an upper portion and a lower portion, and the half-wave plates are disposed within the upper portions on the first surface.

12. An image projection system, comprising:

a light source providing a visible light beam;

an optical polarizing module disposed near the light source in the light beam, comprising:

a polarizing beam splitter, reflecting light with a first polarization , defining a first beam, and passing light with a second polarization;

a mirror, disposed near the polarizing beam splitter with a predetermined acute angle to reflect light with the second polarization, passing through the polarizing beam splitter again and forming a second beam;

a first lens array, having a plurality of first lens cells facing the polarizing beam splitter and disposed near the polarizing beam splitter to couple the first beam and the second beam; and

a second lens array with a first surface and a plurality of second lens cells on the

opposite side, wherein the second lens array is disposed parallel to the first lens array with a first distance; and

a plurality of elongated half-wave plates disposed on the first surface to convert the direction of the first polarization of light in the second beam directed from the first lens array into the direction of the second polarization;

a display module, displaying an image in accordance with image data fed thereto to modulate the first and second beams provided by the optical polarizing module; and

an optical output lens assembly, directing light from the display module and projecting the modulated light.

13. The image projection system as claimed in claim 12, wherein the light source is a convergent light source.

14. The image projection system as claimed in claim 12, wherein the polarizing beam splitter is a wire grid polarizing beam splitter.

15. The image projection system as claimed in claim 12, wherein the incident angle between the light beam and the polarizing beam splitter is between 35° and 55°.

16. The image projection system as claimed in claim 12, wherein the first and second lens arrays are used in

an optical system with the F-numbers between f/1.5 and f/3.

17. The image projection system as claimed in claim 12, wherein the first lens array and the second lens arrays have the same aspect ratio.

18. The image projection system as claimed in claim 12, wherein the first surface of the second lens array faces the first lens array.

19. The image projection system as claimed in claim 1, wherein the first and second lens arrays are parallel to an intersection of the extending planes of the polarizing beam splitter and the mirror.

20. The image projection system as claimed in claim 19, wherein an elongated axis of each half-wave plate is parallel to the intersection.

21. The image projection system as claimed in claim 12, wherein the relationship between the first distance (t) and the predetermined angle (θ) is $\theta = \frac{d_2}{2t}$, wherein (d_2) is the length of the longer side of the second lens cells.

22. The image projection system as claimed in claim 12, wherein the half-wave plates are disposed on the first surface parallel to each other at the same intervals.

23. The image projection system as claimed in claim 22, wherein the width of each half-wave plate is equal to half the length of the longer side of the second lens cells.

24. The image projection system as claimed in claim 23, wherein the intervals of the half-wave plates are equal to half the length of the plurality of second lens cells.

25. The image projection system as claimed in claim 24, wherein a central line divides each second lens cell into an upper portion and a lower portion, and the half-wave plates are disposed within the upper portions on the first surface.

26. The image projection system as claimed in claim 12, wherein the display module is a liquid crystal display, and the distance between the second lens array and the liquid crystal display defines a second distance (l).

27. The image projection system as claimed in claim 26, wherein the relationship between the length of the plurality of first lens cells (d_1) and the length of the plurality of second lens cells (d_2) is $\frac{d_2}{d_1}=\frac{l}{l+t}$.